1	IN THE UNITED STATES DISTRICT COURT
	FOR THE EASTERN DISTRICT OF TEXAS
2	MARSHALL DIVISION
3	SIMPLEAIR, INC. * Civil Docket No. * 2:13-CV-587
4	VS. * Marshall, Texas
5	* * March 18, 2014
6	* * * 8:00 A.M.
7	TRANSCRIPT OF JURY TRIAL
8	BEFORE THE HONORABLE JUDGE RODNEY GILSTRAP UNITED STATES DISTRICT JUDGE
9	
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1 APPEARANCES CONTINUED: 2 3 FOR THE DEFENDANTS: MS. DANIELLE WILLIAMS Kilpatrick Townsend & Stockton 4 1001 West Fourth Street Winston-Salem, NC 27101 5 MS. JENNIFER PARKER AINSWORTH 6 Wilson Robertson & Cornelius 909 ESE Loop 323, Suite 400 7 75701 Tyler, TX 8 ************ 9 10 PROCEEDINGS 11 12 (Jury out.) 13 COURT SECURITY OFFICER: All rise. 14 THE COURT: Be seated, please. 15 All right. Are the parties ready to read into the 16 record those items from the list of preadmitted exhibits 17 that were used before the jury as a part of yesterday's 18 trial? 19 MS. DERIEUX: Yes, Your Honor. 20 THE COURT: If the Plaintiff will proceed. 21 MS. DERIEUX: Yesterday's trial included the 22 following Plaintiff's exhibits: No. 7, 33, 49, 85, 98, 117, 23 120, 121, 258, 266, 267, 268, 269, 270, 271, 284, 285, 286, 24 287, 305, and 308.

THE COURT: All right. Are there any objections

to that rendition by the Defendant?

MS. AINSWORTH: No, Your Honor.

THE COURT: All right. Does the Defendant have a similar list to read into the record?

MS. AINSWORTH: Yes, Your Honor.

THE COURT: Proceed.

MS. AINSWORTH: For Defendant Google just one exhibit, and that was Defendant's 367.

THE COURT: Any objection by the Plaintiff?

MS. DERIEUX: No, Your Honor.

met and conferred yesterday evening with regard to the issue of whether the door had been opened to the issue of non-infringing alternatives being implemented. I've looked at the transcript sections that supposedly relate to that issue. I don't want to take a lot of time, but I'd like a minute or less from both sides on their positions in this regard, starting with the Defendant because they're the one that raised the issue.

MR. STOCKWELL: Your Honor, yesterday when he testified, Dr. Knox was trying to address an issue that the Court noted at the pretrial conference was going to be Plaintiff's burden, and, namely, that was apportioning the messaging for U.S. out of the worldwide revenue.

And in the course of doing that, he expressly said

that the U.S. numbers were several billion, and that was a change from his prior testimony at the first trial of several hundred million. And that was based on his testimony that that was up -- what it would be up through -- I think he had something like today's date or the current date. I don't remember the exact language in the transcript, Your Honor, which we -- we tendered our copy to the Court.

And we believe Mr. Mills also made reference to the fact that Google's message flow continued to grow.

Again, Plaintiff has suggested that — that in the course of apportioning, they're talking about U.S. message flow as of today. And Counsel made a reference to the fact that in opening, in the time it took him to speak a sentence, it was going — Google was going to infringe hundreds of thousands of times in the time it took.

So we think this has opened the door as to whether or not Google is actually using the service in the United States today, because that formed the basis for their estimates as to how many messages are being delivered in the United States.

THE COURT: All right. What's the Plaintiff's response?

MR. EICHMANN: Your Honor, there's been no opening of the door. One thing I would first note is they have

three or four different instances during the day yesterday when they contend that we opened the door. They didn't raise an issue with us or with the Court after the first one, the second one, the third one, or the fourth. They just sat back and said, okay, look, it looks like they're opening the door.

If they had contended to us that there was an issue there, we could have probably raised today or made sort of a corrective statement, if they thought there was any sort of prejudice there.

But more importantly, the testimony was about how it's grown over time from the time the case -- excuse me -- from when the first service was being offered to the time the case was filed to the time that they last produced data, which was July of last year, through the end of the last trial.

Mr. Dovel's comment in opening about the infringement during the course of the opening was something to explain and bring — make it concrete about just how many times, 11 million per day, adds up to. There was no explicit reference, no implicit reference to ongoing infringement that's actually occurring today, and there's no prejudice. We've not opened the door on this, Your Honor.

THE COURT: Well, the -- the Court's looked at this. My understanding of the allegations regarding the

non-infringing alternative being implemented is the routing of messages offshore either with servers moved over there or through Buzz-type hardware -- or software activated there. And the numbers in the testimony don't have any relation that I can see to the actual routing geographically of the messages. I don't believe that this opens the door, and I find that it doesn't.

That doesn't mean the door still can't be opened, and the Court is looking for that. But at this point, I don't find that the door's opened, so I believe that whatever's in place previously with regard to this issue of non-infringing alternative remains in place.

Now, I understand there's also an issue with regard to the use by Google's representative, Mr. Gold, of a preadmitted exhibit. What's the objection on that, Mr. Eichmann?

MR. EICHMANN: The objection, Your Honor, is that the context of their use of that exhibit and the presentation of Mr. Gold, from what we can decipher from the demonstratives, is that they have — they want to have him testify about Android revenues, and it's mis — they haven't produced to us the revenues for the last three quarters going through the end of 2013.

They have a duty to supplement this information.

Mr. Gold was a deponent in this case. He testified that

these reports they create are something that he regularly creates in the course of his business. He has instant access to this, and we believe it's misleading for them to be talking about the revenues and -- as if they were the totals, without presenting the full picture.

We also believe that they have a disclosure issue here. They've had no reason for not having disclosed this information. They say, well, you asked for it too late. I don't think they've even asked their witness for it. He can get this in the break — the next break. This is information that's readily at their fingertips.

The only reason they haven't used it is because they know it shows that in the last quarter they produced data for 1.1 billion for the first quarter of 2013, but that increased over the last several quarters after that.

So I understand it's a preadmitted exhibit, Your Honor, but that doesn't mean they can present that as if that's the total Android revenue. You can still -- you still have to give context to how these exhibits are used.

THE COURT: Well, this is a preadmitted exhibit. If there was objection, it should have been raised during pretrial when we dealt with the exhibits. The witness is entitled to testify from his personal knowledge regarding the preadmitted exhibit. That does not mean he can't be cross-examined vigorously by the Plaintiff as to what is

beyond the exhibit, but I'm not going to exclude use of a preadmitted exhibit in the trial.

MR. EICHMANN: Understood.

THE COURT: So that objection is overruled.

I also understand there's a dispute regarding the intended testimony of Mr. Payne with -- with regard to use of one or more demonstratives presented by Mr. Mills.

What's the -- what's the issue there?

MR. EICHMANN: Your Honor, at the conclusion of his testimony, we plan to put up on the board two slides to prompt him that, hey, now, we're going to talk about settlements; you were here yesterday; you saw that the experts and the parties in opening discussed that SimpleAir has all these settlements; I want to spend a few minutes talking with you about that.

And it's just simply a prompt that this is a slide that was showed yesterday in opening and during Mr. Mills that I want to ask you about. You settled with all these parties for all this amount. Let's -- let's talk about this. They're claiming that you're seeking too much money here compared to these guys. Why -- you know, what's your thought on that?

THE COURT: Well, you're the proponent. Let me hear from the objecting party.

MR. STOCKWELL: Your Honor, the -- the principal

objection is that what they're doing is reusing Mr. Mills' two -- two -- I believe two of Mr. Mills' slides that summarize his evidence as to the body of license agreements, and he categorized them into the push notification license agreements and the other license agreements.

That was the subject matter of expert testimony, and this is a fact witness, and I certainly don't object to Mr. Eichmann asking the witness about what the demand is and the circumstances of the settlement agreements, but I believe this is crossing the line and getting into — getting this witness to get into expert testimony by reinforcing what Mr. Mills did and showing the way Mr. Mills categorized the various settlement agreements.

THE COURT: All right. Well, we're not there yet.

I doubt the parties' crystal ball is any better than the

Court's. If the demonstrative slide has been used with Mr.

Mills, it's certainly fair game as a demonstrative or jury

aid with Mr. Payne. But he's going to be limited to fact

witness testimony, and if he crosses the line into opinion

testimony, I'll expect an objection and will probably

sustain it.

MR. EICHMANN: I understand, Your Honor. But just -- just as a factual matter, those three comments about the settlement -- Apple, Microsoft, and BlackBerry -- have push notification services for operating systems. That's not an

opinion testimony, so that's -- that's --

THE COURT: Well, I'll take it up when it happens, Counsel.

MR. EICHMANN: Yes, sir.

THE COURT: But you're entitled to use the demonstrative with him.

MR. EICHMANN: May I raise one more issue regarding Mr. Payne?

THE COURT: All right.

MR. EICHMANN: Mr. Stockwell informed the Court's clerk, Ms. Du, that he expects to approach the bench during Mr. Payne's cross-examination on some certain in-limine issues. You know, the last time we had a bunch of back and forth, and the Court obviously wasn't very pleased with that during his cross.

I just want to alert the Court we think there's going to be an issue again with them, one, trying to raise the no-prefiling-notice issue of which they already went a little too far yesterday in the Court's opinion on that.

And the second is this issue about Facebook and their license and trying to again backdoor in their argument about Facebooking license. So I just want to kind of alert the Court that there's -- we might have some issues in that regard.

THE COURT: Well, you know, the parties have a

right too seek leave on any limine issue. I'm not going to preclude that. I would hope we don't create a disruption by repetitive trips to the bench, but we'll do what we have to do.

All right. Is there anything else we need to go over or raise before we bring in the jury?

MR. STOCKWELL: Your Honor, and I'm happy to tell you the two issues right now, if you think it would help. I don't think they even touch on your in-limine rulings, but I want to be very cautious and approach if it even gets close.

THE COURT: Well, why don't you give me a preview, Mr. Stockwell.

MR. STOCKWELL: Okay. So, Your Honor, one of the issues is going to be the '279 lawsuit. Remember, the Court had said we can't -- you know, you generally didn't want us talking about the lawsuits they filed against Google and the OEMs, but that if we open the door on the non-infringing alternative and they went into the '279 patent, then I could go into the '279 lawsuit. So that's one issue that I intend to cover with Mr. Payne.

THE COURT: Well, my instructions were that you could go so far as to say the '279 lawsuit is pending.

MR. STOCKWELL: Yes, sir.

THE COURT: That's where it stops, not beyond that, not into the allegations or the particulars. Just to

establish that that litigation is pending.

MR. STOCKWELL: And then the -- the -- the follow-up question I would like to ask, Your Honor, is: And you're going to be seeking additional damages on the '279 patent in that lawsuit.

THE COURT: That goes beyond my instruction. I think that's -- I think anybody understands there's a lawsuit, there will be damages sought as a part of it. But my instruction was that if the door was opened, you were entitled to establish that the pending '279 lawsuit is in place and pending, and that's -- that's the extent of it.

MR. STOCKWELL: Okay.

THE COURT: That was my ruling in pretrial.

MR. STOCKWELL: Okay.

THE COURT: And we're not going to -- we're not going to vary the pretrial rulings during the middle of the trial.

MR. STOCKWELL: I understand, Your Honor. The -- the second issue is with respect to the -- Microsoft's settlement agreement. They're getting into some timing issues on the re-examination and when that -- when it was settled relative to the Microsoft agreement which necessarily requires that I at least identify the dates and the timing of the lawsuits against Microsoft.

The motion in limine they filed was only about the lawsuits against Google and the Android OEMs. I don't think it touches on that motion in limine, Your Honor. But I did want you to know that as part of responding to their issue on the -- the Microsoft agreement, I needed to get into the dates of the lawsuits they filed against Microsoft and which patents were at issue there.

THE COURT: All right. Mr. Eichmann, do you think there's a limine issue here? And if so, what?

MR. EICHMANN: Well, Your Honor, he's right. The in limine itself didn't cover that, but the same reasoning and the same arguments that we presented do apply to that and I think the Court's ruling should be the same as it is on the '279 suit. If they want to raise the fact — and it's in the Microsoft agreement that there was two actions, first action and a second action. You know, that's — that's in evidence. We're not disputing that there was two lawsuits filed against Microsoft.

But if they want to try to go in, again, to, well, you were going to seek all these other damages against Microsoft in that second suit, that requires us to untangle that with a lot of additional testimony. It's very confusing, and we think prejudicial so we think it should be treated the same way as the Court is handling the issue on the '279 patent suit against Google.

THE COURT: Well, I'm going to hold both sides to the express wording of the limines that have been presented in pre-trial. However, just because this may not be within the scope of the existing in limine, that doesn't mean that there aren't still valid objections as to relevance and other things if it goes too far. So I'm not going to hold the Defendants to a limine that is not set out in the pre-trial order.

That being said, Counsel, if -- if that open door causes your opposing side to go beyond what the scope of the relevance would be, then I would think an objection as to that would be proper. So your hand is not tied as to any other objections allowed by the rules. But I'm not going to extend the -- the scope of the limine beyond what it says on its face.

MR. EICHMANN: I understand, Your Honor.

THE COURT: All right. Anything else, Counsel?

MR. EICHMANN: Not from us -- not from the Plaintiff.

MR. STOCKWELL: No.

THE COURT: Now, we're going to continue with Mr. Mills on the stand. And if you will recall when we recessed yesterday, the courtroom was sealed. So we'll need to reestablish the sealed nature of the courtroom given that Mr. Mills is on the stand; is that correct? Everybody agree

with that?

2 MR. STOCKWELL: Defendant agrees, Your Honor. THE COURT: I know Ms. Smith does. 3 4 MS. SMITH: Thank you, Your Honor. 5 MR. EICHMANN: We don't object to it, and yes. 6 THE COURT: All right. Mr. Mills, you want to 7 return to the witness stand, please? 8 And just so we can accomplish this before the jury 9 comes in, if there's anyone in the courtroom who's not 10 subject to the existing protective order in this case, then 11 the -- I'm sealing the courtroom and you are to excuse 12 yourself from the courtroom at this time. Anybody not 13 subject to the existing protective order in this case? 14 All right. We'll note for the record the 15 courtroom is sealed, and, Mr. McAteer, if you'll bring in the jury. 16 17 COURT SECURITY OFFICER: Yes, sir. 18 All rise for the jury. 19 (Reporter's Note: At this time the courtroom was 20 sealed and that portion of the transcript is filed under 21 separate cover; Sealed Portion No. 1.) 22 (Courtroom unsealed.) 23 THE COURT: All right. Plaintiff, call your next 24 witness. 25 MR. EICHMANN: Your Honor, Plaintiff calls John

1 Payne. 2 THE COURT: If you'll come forward, Mr. Payne. 3 MR. EICHMANN: Your Honor, may we proceed? 4 THE COURT: You may proceed. 5 JOHN PAYNE, PLAINTIFF'S WITNESS, PREVIOUSLY SWORN 6 DIRECT EXAMINATION 7 BY MR. EICHMANN: 8 Q. Good morning, Mr. Payne. 9 Good morning, Mr. Eichmann. 10 Can you introduce yourself to the jury, please? 11 A. Yes. My name is John Payne. I'm the president of 12 SimpleAir, the co -- or the lead inventor on all of its 13 patents, and along with my co-inventor, Tim von Kaenel, Mr. 14 von Kaenel, I live in California and I have my wife Mary Ann 15 and two children who -- Jack and Michael. 16 Q. I'm going to ask you to slow down just a little bit as 17 we get started, if that's okay. And is Mr. von Kaenel here 18 today, too? 19 He is, yes. 20 Q. Sitting in the front? 21 A. Yes, that's correct. 22 Dr. Knox introduced us to the two of you and a little 23 bit about your invention yesterday. And I wanted to talk

briefly about this -- this issue. As we heard from Dr.

Knox, you were with a company called AirMedia back in 1996;

24

- 1 | is that right?
- 2 | A. That's correct.
- $3 \parallel Q$. Was Mr. von Kaenel there with you?
- $4 \parallel A$. Yes, he was.
- Q. What did the two of you do at the company? What were
- **6** your positions?
- 7 A. Well, I was originally the president and subsequently
- 8 | the CEO of the company, and Mr. von Kaenel was in charge
- 9 | first of products and then of research and development for
- 10 | all products.
- 11 | Q. How big a company was AirMedia?
- 12 A. It was roughly 150 people of whom a significant portion
- 13 were an engineering team. They grew from a smaller base
- 14 | to -- to that size as we built the AirMedia Live Internet
- 15 | broadcast network.
- 16 | Q. And do you actually recall back in this time frame when
- 17 | you, Mr. von Kaenel, and the other members of your team came
- 18 | up with the idea that's at issue -- the invention in this
- 19 | case?
- 20 | A. I do recall, yes.
- 21 \parallel Q. Why is it that you recall?
- 22 A. Well, it was -- it was a major event in the -- in the
- 23 company's life. This was sort of an exciting time. The
- 24 | Internet was just becoming a commercial entity, and so it
- 25 was just a very exciting time working on the problem of how

- 1 do you connect devices -- how do you connect the Internet to 2 wireless networks.
- Q. In this 1996 time frame, was AirMedia already offering
 products and services?
 - A. AirMedia had products expressly for wireless networks.

 So it already had products. The -- but not -- it already had products.
 - Q. So how exactly did this invention come about?

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- 9 Well, we -- we set out to take advantage of the existing 10 wireless products that we had and how to coordinate those 11 with the Internet. And to do that, we built a product 12 called AirMedia Publisher, and the idea of AirMedia 13 Publisher was that large companies who had sales 14 organizations distributed across the country could have data 15 about pricing and various other catalog-related things 16 downloaded overnight to their sales force so they -- when 17 they were in front of a customer, they had access to that 18 data.
- Q. On the slide here, we showed the invention in 1996, butdid your work on that actually occur earlier?
- 21 \parallel A. That's correct, it occurred in 1995.
- 22 Q. Tell us about when this started exactly in 1995, and -23 and how it came about.
- 24 A. Well, the original work on AirMedia Publisher was -- was
 25 early in the year, and we discovered when we were doing the

- 1 development of the product that it wasn't a viable product.
- $2 \parallel$ And we decided that if we had more than the top five
- 3 companies in the country, there wasn't enough bandwidth in
- 4 | the networks to actually be able to make the product work.
- 5 | The bandwidth at the time was a very big constraining
- 6 | factor, and so we began to look at ways we could use our
- 7 | tools to build something that could be delivered on these
- 8 | very narrow bandwidth networks.
- 9 | Q. Was there a particular meeting where this came about?
- 10 \parallel A. There was. As we -- as we began to -- to look at this,
- 11 we realized that instead of building something for big
- 12 corporations, we could build something that consumers could
- 13 \parallel actually use to solve a problem in -- in their home. It was
- 14 \parallel my idea. I originally made the -- the drawings for it, and
- 15 | then we convened a team of people, including Mr. von Kaenel
- 16 \parallel and others, and did what in our business you call a -- a
- 17 | white board session. A white board is like a big chalk
- 18 | board.
- 19 Q. Can you slow down again, sir?
- 20 | A. Sorry.
- $21 \parallel Q$. You drew this out on a -- on a chalk board or white
- 22 | board?
- 23 A. That's correct.
- 24 Q. And after you had this initial meeting, what happened
- 25 | after that?

- 1 A. Well, we -- we set upon doing further design, and -- and
- 2 then subsequently development of the product. It was a very
- 3 complex situation because we were trying to build something
- 4 | that didn't exist at the time. 1996 was very, very early in
- 5 | the -- both Internet and wireless networks, so...
- 6 Q. Now, did you actually at AirMedia build a system that
- 7 | was meant to implement an example of the invention?
- 8 A. That's correct. In addition to the patents, we built a
- 9 commercial network that was -- was widely distributed across
- 10 \parallel the United States and -- and, again, was very complex.
- 11 \parallel Q. On the screen here is this actually a diagram of what
- 12 | your system looked like?
- 13 A. Yes, that's correct.
- 14 \parallel Q. And in the middle, is that what the patent refers to as
- 15 | your central broadcast server?
- 16 A. Yes, that's correct.
- 17 \parallel Q. And physically, where was the AirMedia office and where
- 18 | was the central broadcast server?
- 19 \parallel A. Well, we had -- we had two engineering teams. One was
- 20 | located in New York, and that's where the central broadcast
- 21 | servers were, so we had these servers that were connected to
- 22 | both the Internet and wireless networks there. And then in
- 23 | California, we had another team who were doing software
- 24 development for the PC side of things. And then in Plano,
- 25 | Texas, we -- our -- our partnership with someone who

- controlled wireless distribution for the whole country was
 where the actual data got uploaded to satellites and then
 distributed down to our customers.
 - Q. And what's shown on this screen here?

- A. Well, this is one of the products that we offered by a company called Philips, which is a very large international consumer electronics company. And it was a small wireless receiver that could receive the AirMedia Live Internet broadcast network and then allow a handheld computer to actually interact with the data and the network.
 - Q. Did you and the others at AirMedia have in mind that at some point you wouldn't have this separate receiver and little computer and put it in a phone together?
 - A. Yes. Like everything else in -- in computers, it starts out big and eventually ends up becoming small. So we knew that before long, we'd be able to have sufficient capabilities included in a -- in a single device. And that we just would -- it would -- we could see that it would be possible.
 - Q. Now, with Dr. Knox we didn't get into that much about what happens on the computer screen when you get these notifications. Can you tell us a little bit about that?

 A. Sure. Well, what we did was build something that were at that time called viewers, which are similar to apps that you find on a smartphone today. And what the viewers were,

- 1 were a way of interacting with notifications and content
- 2 | that were delivered over the Internet live -- the AirMedia
- 3 | Live Internet broadcast network.
- $\mathbf{4} \parallel \mathbf{Q}$. On the screen here, is this an example of what the
- 5 | viewers looked like?
- 6 A. That's right. On the right, you see a CNN viewer, and
- $7 \parallel$ on the left you see a -- a remote control that was used to
- 8 | -- actually by the user to actually control different kinds
- 9 of content that they wanted to see, similar to how you do
- 10 | today with a smartphone.
- 11 \parallel Q. When you refer to a remote control, is this actually an
- 12 | image that's on the screen?
- 13 \parallel A. It's actually an image on the screen that happens to
- 14 | look like a remote control.
- 15 | Q. And you could -- could you click on these little icons
- 16 | to get into the individual apps?
- 17 | A. That's correct.
- 18 \parallel Q. Now, how was the AirMedia Live service received by those
- 19 \parallel in the industry?
- 20 | A. It was -- it was very -- very well received. It was
- $21 \parallel$ something that many people -- most people actually thought
- 22 | was impossible. We had to build a unique piece of hardware
- 23 because nothing was available. We had to build software
- 24 | that had never been built before and use networks in a way
- 25 | that they'd never been used before and so the -- the

1 response from the industry was very, very positive. 2 THE COURT: Mr. Mills -- excuse me, Mr. Payne, 3 please try to slow down some. It's -- it's hard for the 4 court reporter to type as fast as you talk. 5 THE WITNESS: I'm sorry, Your Honor. 6 THE COURT: Just -- just take a deep breath and 7 slow down. 8 All right. Let's continue. 9 MR. EICHMANN: Thank you, Your Honor. 10 (By Mr. Eichmann) Now, does this slide show some of the 11 actual awards that AirMedia received in 1996 and '97? 12 That's correct. Α. 13 That was from Plaintiff's Exhibit 98, I believe? 14 Yes. 15 What's shown here, there's a reference to Comdex, and 16 then you see some AirMedia images on the screen? 17 A. Well, Comdex for many, many years was the largest 18 computer trade show in the -- in the world actually. And so 19 this was CNN who were providing news coverage of Comdex and 20 -- and covered our AirMedia Live product as one of the 21 really innovative products at Comdex. On the right, you can 22 see our trade show booth from that time where AirMedia Live 23 was announcing to the world what it was doing. And then at 24 the bottom you see a much, much younger picture of me

actually demonstrating how the product worked.

- Q. Now, you got some of these awards and some press

 coverage. How did the AirMedia Live do in terms of the

 number of users that -- that actually sign up for it? There
- 4 was a suggestion that -- that it -- that is wasn't really a
- 5 commercial success; is that true?
- $6 \mid A$. Well, we had -- we had a number of -- we had a -- a
- 7 | fairly large, although not critical mass number of consumer
- 8 users. The number of PCs in the country at that time was
- 9 | relatively small. And we were quite early in terms of being
- 10 | a little bit ahead of the curve.
- 11 | Q. You're not claiming that AirMedia was a huge commercial
- 12 | success and made a whole bunch of money off of this
- 13 | invention, are you?
- 14 \parallel A. No, in fact -- pardon me -- eventually the company
- 15 \parallel failed for a variety of reasons, including the fact that we
- 16 | were too early.
- 17 \mathbb{Q} . How much money did the company put into developing this
- 18 | system?
- 19 \parallel A. We invested in excess of \$25 million at that time.
- 20 | Q. Now, were your patents originally owned by AirMedia
- 21 | because that was the company that -- where you worked?
- 22 A. That's correct. Most of the time when you develop
- 23 something working for someone, you assign the patents. Even
- 24 | though we're the inventors, we assign the patent to the
- 25 company and the company owned it.

- 1 | Q. And did you at some point get the patents back?
- 2 A. We did. We -- we bought the patents back as part of the
- 3 | transaction.
- $4 \parallel Q$. And how did that -- that come about?
- 5 A. Well, after I had left the company, the -- AirMedia,
- 6 AirMedia filed bankruptcy. I was in the middle of
- 7 | another -- actually taking another company public at that
- 8 | time, and so I -- Mr. von Kaenel and I subsequently bought
- 9 | AirMedia from the creditor who bought it out of the
- 10 ∥ bankruptcy.
- 11 | Q. And they mentioned that you didn't pay any cash up
- 12 | front. Can you explain what happened there? How did you
- 13 | get the patents if you didn't pay any -- pay any cash?
- 14 \parallel A. Well, this was very early. This was in, gosh, 10 or 11
- 15 | years ago. And Mr. von Kaenel and I knew the value of the
- 16 | patents because we had been closely involved in -- but --
- 17 \parallel but we also knew that it was going to take some time in
- 18 \parallel order to be able to see how their value would be realized.
- 19 | Q. And so SimpleAir now is a company that you formed?
- 20 | A. That's correct.
- 21 \| O. With Mr. von Kaenel?
- 22 A. That's correct.
- 23 \parallel Q. Is there another investor, as well?
- 24 A. There's one other small shareholder, also.
- 25 | Q. Do your families also -- also own a small share?

- 1 | A. That's correct.
- $2 \parallel Q$. And does SimpleAir own the patent in this case?
- $3 \parallel A$. SimpleAir owns the patent in this case, yes.
- 4 Q. Now, I want to turn to the topic of the settlement
- 5 | agreements that SimpleAir has reached. Did you and Mr. von
- 6 Kaenel approve each of these agreements?
- 7 | A. Yes.
- $8 \parallel Q$. And I want to focus in particular on the Apple,
- 9 | Microsoft, and BlackBerry agreements. Do those agreements
- 10 | stand out in your mind as being different than the other
- 11 | ones?
- 12 | A. Yes.
- 13 $\|$ Q. Why is that?
- 14 \parallel A. Well, they're two what in our business are called
- 15 \parallel platform providers, people who provide an entire back end
- 16 | system that delivers notifications.
- 17 \parallel Q. And the range of settlements from BlackBerry to Apple is
- **18** | 4.75 --
- 19 MR. EICHMANN: Your Honor, I forgot that we had
- 20 unsealed. Is there --
- 21 THE COURT: Are you asking to seal the courtroom?
- MR. EICHMANN: Yes, Your Honor, I am.
- 23 THE COURT: All right. Is there objection by the
- 24 | Defendant?
- 25 MR. STOCKWELL: No, Your Honor.

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THE COURT: All right. Then the Court will order the courtroom sealed. If you're present in the courtroom and not subject to the existing protective order, you should excuse yourself at this time. MR. EICHMANN: Apologize, Your Honor. (Reporter's Note: Courtroom sealed at this point; transcript filed under separate cover; Sealed Portion No. 2.) THE COURT: All right. Proceed, Mr. Stockwell. MR. STOCKWELL: Thank you, Your Honor. JON GOLD, DEFENDANT'S WITNESS, PREVIOUSLY SWORN DIRECT EXAMINATION BY MR. STOCKWELL: Could you please tell us your name? Jon Gold. Α. Q. And where do you work, sir? I work for Google in --Q. Mr. Gold, you might need to adjust your mic somewhat. A. Is that better? Q. Yes, thank you. What do you do at Google? I'm a finance manager. Α. And what's your job responsibilities as a finance manager?

A. I manage a team of financial analysts. We provide

- numbers to -- business insights to business about those
 numbers and then try to support business decisions.
 - Q. What businesses do you work with?
 - A. The three businesses that really fit under the Android umbrella, one is the Android group of engineers that build the Android operating system; the group of people who work on the Google Play business; and lastly, the people who work
 - Q. So before we get into the details on some of that, can you please tell us a little bit about your background and how you end up coming to join Google?
 - A. Sure. I went to the University of Michigan. I studied math, economics, and computer science there. I spent a while at General Electric and then returned to school, got my MBA from NYU in finance, and joined Google in 2009.

THE COURT: Mr. Gold, I'm going to ask you to slow down a little bit, if you can.

THE WITNESS: Sure.

to sell Android devices.

THE COURT: All right. Continue.

- Q. (By Mr. Stockwell) Since you've been with Google, have you learned a little bit about how the company was founded?
- 22 | A. I have.

- Q. And can you tell us how big Google was when it was founded?
- \parallel A. Sure. In 1998 when it was founded, it was just two

- 1 | people, Larry Page and Sergey Brin.
- $2 \parallel Q$. And what were they working on?
- $3 \parallel A$. They were primarily working on their search engine,
- 4 | trying to provide a service for users to navigate the web,
- 5 | find the information that they need in an easy fashion.
- 6 Q. Does Google still offer a search engine?
- 7 | A. It does.
- 8 MR. STOCKWELL: Mr. Barnes, if we could have the
- 9 | first slide, please.
- 10 | Q. (By Mr. Stockwell) Do you recognize this, Mr. Gold?
- 11 | A. I do.
- 12 \parallel Q. What -- can you explain what you see on the slide,
- 13 please?
- 14 A. Sure. On the left-hand side of the page is the search
- 15 engine just described. It's offered for free to users. On
- 16 \parallel the right-hand side of the page is several applications that
- 17 Google has created over the years.
- 18 \parallel Q. And can you tell us a little bit about some of those
- 19 other products and services that Google offers today?
- 20 A. Absolutely. One in particular is YouTube. This is a --
- 21 | a video service where people can watch videos, upload
- 22 | videos, share things with friends, consume all that data.
- 23 The -- another one is maps. This is also a free
- 24 | service. Its online maps allows people to get directions
- 25 | from place to place. It allows them to find local

- 1 | restaurants, hotels, things along those lines.
- 2 Q. There's also an icon there labeled play. Can you
- $3 \parallel$ explain what the play icon is?
- 4 A. Yes. Google Play is an online store. It allows
- 5 consumers to buy apps, digital content, and hardware.
- 6 Q. And what do you mean by digital content?
- 7 A. That's digital movies, books, music, various things that
- 8 you consume on your phone or on your PC.
- 9 | Q. So you mentioned that you support the -- the Android
- 10 | business. What is the Android business at Google?
- 11 A. It's really three things. It's -- one is the group of
- 12 | engineers who work on developing the Android operating
- 13 | system. It's the Google Play, which I just described, from
- 14 | an apps and content perspective; and then it's the selling
- 15 \parallel of hardware.
- 16 \parallel Q. How many people are working on the Android business at
- **17** | Google?
- 18 | A. About 1400.
- 19 | Q. And you mentioned the -- the Android operating system.
- 20 | Is that an open source operating system?
- 21 | A. It is.
- 22 | Q. What does that mean?
- 23 | A. So there are really two different major categories of
- 24 | operating systems. There's open source and there's
- 25 proprietary.

If an operating system is proprietary, generally it has a fee associated with it. It's not just available for anyone to use.

An open source operating system is really the opposite of that. The data -- the code behind that operating system is readily available to the public.

Someone can simply get that information -- that code for free, put it on a device, and their device would work using the operating system.

- Q. So what does the Android operating system do generally?
- A. Basically makes the phone work. So if you just had a device without an operating system on it, it really wouldn't do much. What the operating system does is allows it to connect to cell towers, connect to WiFi, places allows people to search, send email, things along those lines.
- Q. I want to talk a little bit about the Android features and versions.

MR. STOCKWELL: If you could put up the next slide, Mr. Barnes.

- Q. (By Mr. Stockwell) Do you recognize some of the versions of Android that are shown on the left of your slide?
- A. I do. So what you see here is five of the versions of
 Android that we released. As you can see, we're sort of
 obsessed with food, and so what this actually represents
 is -- these are pictures of -- of Androids in different --

associated with fruit. So you see frozen yogurt, an ice cream sandwich, et cetera. These are just code names that we used internally and externally to categorize new releases of the operating system.

- Q. And on the right-hand side, there's some features. What are those features?
- A. This is a subset of the features that come free with the operating system. So just to go through a few of them, voice-activated features, this would be something like you simply say to your phone: Send email to my wife; I'm going to be home late for dinner. And it says that; it sends it. You don't have to type to do that.

Another example would be the WiFi hot spot. Say you're traveling away from your home. You have a laptop with you. You'd like to connect to the Internet to do searches and browse the Internet. This allows you to use your phone to send essentially the app, that connection to your laptop.

And then the third one I mentioned is the camera. A lot of phones have cameras, and the Android engineers have spent a lot of time really trying to make that camera better. Often, I know, at least when I try to take a picture, my hands can sometimes shake. We try to work on things like stabilizing the picture. Gives the ability to people to do editing of the picture after -- after they take it, if they want.

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2-dollar range.

THE COURT: Mr. Gold, you're doing some better, but you're still talking too fast. If you can try to continue to slow down. THE WITNESS: Absolutely. I apologize. THE COURT: Let's continue. (By Mr. Stockwell) So what's not listed on that feature slide are apps. What -- what is an app? A. An app is short for application. It is a piece of software that is developed by an application developer, and it provides some form of utility to an end user. Examples of apps could be anything from all sorts of different games to things like a flashlight or calculator, those -- those basic type of things that you would use on your phone. Q. How does a user get an application on -- onto an Android phone? A. There are several different ways. One of the more common ones is to go to Google Play. Search for the app that you're looking for or the type of app that you're looking for. When you find it, if it's free, you just download it. If it cost money, you would pay that money and then download it. Q. What do you typically charge for an app? A. Most of the applications are for -- when they do have a cost, I've generally seen that it's been in the 1- to

- 1 | Q. Now, does Google try to understand the percentage of
- 2 | Android users that have actually bought an app or content
- **3** | from the Google Play Store?
- 4 | A. There have been studies that we've -- we've done to
- 5 | understand that number.
- 6 Q. And what -- what percentage of Android users have
- 7 | actually bought apps or content from Google Play?
- 8 A. Less than 15 percent have ever bought an app from Google
- 9 | Play.
- $10 \parallel$ Q. Does that mean the remaining 85 percent of Android users
- 11 | have never purchased directly anything from Google through
- 12 | Google Play?
- 13 A. Yes. It means that the other 85 percent of Android
- 14 | users have never purchased anything from Google Play.
- 15 | Q. Okay.
- 16 MR. STOCKWELL: If we could go to the next slide.
- 17 \parallel Q. (By Mr. Stockwell) Those Android users, do they use
- 18 \parallel phones -- Android phones that are provided by other --
- 19 companies other than Google?
- 20 \parallel A. They do. This picture is -- shows four of those
- 21 | companies and four of those types of phones. You see these
- 22 | are the phone manufacturers or examples of some of the phone
- 23 | manufacturers that use the Android operating system.
- They -- some of these also make phones with other
- 25 | operating systems, but they also all use Android.

- 1 Q. Does Google charge anyone for use of the Android
- 2 | operating system?
- $3 \parallel A$. No, it does not.
- 4 | Q. Has Google ever charged for the Android operating
- 5 | system?
- $6 \parallel A$. No, it has not.
- 7 | Q. Now, you mentioned that concept of open source. How
- 8 does the -- the charge for the free nature of Android relate
- 9 | to it being open source?
- 10 | A. Because it's open source, anyone can use it at any time.
- 11 | So the idea that we can charge for it really just would
- 12 | never work, because if we tried to charge for it, someone
- 13 | can go and simply get the data and get the software
- 14 | themselves, load it onto phones, and go about their
- 15 \parallel business.
- 16 | Q. Does Google charge any fees for -- to anyone for using
- 17 | Google's messaging service?
- $18 \parallel A$. No, we do not.
- 19 $\|$ Q. Now, these -- these handset companies that have phones
- 20 | with the Android operating system, does Google require them
- 21 | to sign a contract to use the Android operating system?
- 22 A. No, it does not. A great example of this is Amazon.
- 23 | They make a product called the Kindle Fire, which is a
- 24 | tablet. Most people actually do not know it runs on the
- 25 | Android operating system, because we have never signed a

- contract with them. They essentially are taking the code,
 made some adjustments to it, and have their own device that
 runs using it.
 - Q. When -- when someone buys an Android phone like one of these from an AT&T store or Walmart, does Google receive any of the money from that sale of an Android phone?
- $7 \parallel A$. No, we do not.

- 8 Q. So how does Google make money when it's giving away
 9 services like Android?
 - A. That's a good question. It's really something that has been alluded to throughout the case that we do a lot of. We provide software and services to people to use for free.

 The primary ways that we've been monetizing the Android phone are through selling the apps that we've mentioned, selling that digital content, and in some cases, also selling the actual device.

MR. STOCKWELL: Your Honor, at this time, we would move to seal the courtroom.

THE COURT: Is there objection from the Plaintiff?

MR. DOVEL: No objection, Your Honor.

THE COURT: All right. Then the Court will order the courtroom sealed.

If you're present in the courtroom and not subject to the current protective order entered in this case, you should exit the courtroom at this time.

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(Reporter's Note: At this point in the proceedings the courtroom was sealed and this portion of the record filed under seal; Sealed No. 3.) (Courtroom unsealed.) THE COURT: The witness may come forward, and Ms. Lockhart will administer the oath to him. If you'll come forward, sir, our Courtroom Deputy here will administer the oath to you. Just come around. (Witness sworn.) THE COURT: Please come around and have a seat. If you'll try to speak into the microphone. All right. Mr. Korn, you may proceed. MR. KORN: Thank you, Your Honor. COSTIN MANOLACHE, DEFENDANT'S WITNESSES, SWORN DIRECT EXAMINATION BY MR. KORN: Q. Please introduce yourself to the jury. A. My name is Costin Manolache. And where do you work and what do you do there? Α. I work for Google. I work in the Google cloud team. All right. And can you tell us a little bit -- and what's your -- your job title? A. I am tech lead for the Google Cloud Messaging team. Q. And what does it mean to be the tech lead?

I am responsible for the functioning of the service.

- 1 implement the features. I optimize the system. I
 2 coordinate the team and organize all the jobs.
- $3 \parallel Q$. And can you tell us just a little bit about yourself?
- 4 A. Yes, I was born in Romania. I got a Master in computer
- 5 science. I work for some companies like Motorola, Sun
- 6 Microsystems. In '98 -- 1998, I come to United States to
- 7 work for a small company, and in 2005 I started working
- 8 | for -- working for Google on Gmail for companies and
- 9 schools. And in 2008, I moved 2008 to working with the
- 10 | cloud team, and I have been there since.
- 11 Q. Thank you. And, Mr. Manolache, if you can slow down
- 12 | just a little bit, we'd appreciate it. Thank you.
- So can you describe what you generally have done on the
- **14** Google Android team?
- 15 \parallel A. I joined working on products -- Google products that
- 16 | needed to be optimized to work on Android -- for example,
- 17 Google Talk, Gmail, and I implemented different features,
- 18 | including the original -- original implementation of Google
- 19 | Cloud Messaging, and I work on education and many other
- 20 | things.
- 21 | Q. And when Google Cloud Messaging was first being
- 22 developed, how many engineers worked on that project?
- 23 | A. Initially we were about three engineers. We were doing
- 24 | other things, as well, but we started with three.
- 25 | Q. And currently how many engineers work on Google's

1 | messaging service?

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- 2 A. We have about seven engineers, also some of them with other systems.
- Q. Now, did Google originally build its messaging service for Google applications?
 - A. Yes, that was original purpose of Google phones.
- $7 \parallel Q$. Can you -- can you explain what that purpose was?
 - A. We needed -- first of all, we needed Google Talk to work, so -- on Android, and then we wanted to have Gmail sync so we have a way to tell the device you got the mail and the device would go on and fetch and get all the e-mail.
- And more teams wanted to do the same thing, and we started to respond to other teams that needed to send or forward messages to the device.
- Q. And at some point did Google make that messaging service available to third-party application providers like Facebook or Twitter, for example?
 - A. Yes, in -- in 2000 -- 2010, we announced that Google IO, that the service is available for -- for many applications, for -- many of these requests like Facebook, and it goes on after these requests.
- Q. And you mentioned Google IO. Can you briefly explain what that is?
- 24 A. That is a big event where people who develop our 25 applications for Google are, you know, made aware of new

products.

THE COURT: Mr. Manolache, obviously, you have an accent, and if you would talk slower, it would help both the Court and the jury understand what your testimony is. So please try to slow down.

THE WITNESS: Thank you, sir.

THE COURT: Thank you very much.

Continue, Counsel.

MR. KORN: Thank you, Your Honor.

- Q. (By Mr. Korn) So, Mr. Manolache, what was involved in opening up Google's messaging service to third-party application providers?
- A. We had to develop a normal piece of software on the servers that accepted messages from Facebook and others and have to filter out, for instance, spam or subusers and then inject the messages into our existing system.

MR. KORN: Mr. Barnes, if you'll grab Slide 2, please.

- Q. (By Mr. Korn) And this is from Defendant's Exhibit 29. This is an architectural drawing of Google's messaging service. Can you explain what's shown on this slide, please?
- A. Yes. The big cloud represents our servers. And I'll go describe them. It is a big cloud. It -- it can hold thousands of machines and multiple data centers all over the

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world. The third-party server that is it on the bottom is something like Facebook or Twitter or some other company that is trying to send a message. And the destination is the device that you see on top -- the application -- they're Facebook application running on the device. And they start with our frontend, which I just described which drops some of the spam or subusers, and then it is -- keeps getting forwarded with -- just like a mailman, we get the message and we forward it to some routers that finds an agent of the device and then it goes to the MCS, which is the server that attempts to deliver to the device using the carrier. The carrier may or may not be able to deliver the message to the device. If it fails, we store the message content to our database and the first time the device gets connected, we deliver any message that was not delivered the first time. Q. And we've heard discussion about Google's messaging servers. Are those the servers that are identified in yellow?

- A. Yes, the yellow are the servers used in Google Cloud Messaging.
- Q. Okay. And can you explain -- explain to us what's meant 22 by server? What is a server?
 - A. We call a server some program that is performing the specific function which may run on -- on thousands of machines distributed on multiple data centers which are

- 1 | located in different parts of the world.
- $2 \parallel Q$. Now, when a notification pops up on -- on the screen of
- 3 | a phone, is that part of the Google Cloud Messaging servers
- 4 | that you discussed?
- 5 | A. No, we are intentionally staying -- not -- not getting
- 6 | involved in any notifications. We are just forwarding
- 7 | messages and let applications do whatever they need to do
- 8 with the message itself.
- 9 | Q. Did Google independently design its Google messaging
- 10 | service?
- 11 | A. Yes.
- 12 \parallel Q. And now, does Google require any application provider to
- 13 | use this service?
- 14 \parallel A. No, we don't require, and they sometimes use alternative
- 15 means.
- MR. KORN: Okay. Mr. Barnes, if you could bring
- 17 | up Plaintiff's Exhibit 99 and go to Page 6, please, and then
- 18 | expand on that chart.
- 19 | Q. (By Mr. Korn) Mr. Manolache, can you explain what's
- 20 | shown in this chart?
- $21 \parallel A$. This is the top 10 list of senders of applications that
- 22 | we got messages for.
- 23 \parallel Q. And what -- can you tell us where this information came
- 24 | from?
- 25 \parallel A. Yes. We generate this from -- from the logs. I -- I --

- $1 \parallel$ we have some programs to fix that, yes.
- $2 \parallel Q$. And was this from July of 2013?
- $3 \parallel A$. Yes, it was -- the -- the numbers are from -- from July.
- $4 \parallel Q$. So who are the main users of Google's messaging service,
- 5 at least as of July 2013?
- 6 | A. In July 2013 and still today, Facebook was a top user
- 7 | and it's the first and the third line. Nowadays, they
- 8 | require other companies so there are more than that. And
- 9 | you see Kakao, for example, is a -- is a Korean company.
- 10 | Naver is -- is a Japanese company. Vkontakte is Russian,
- 11 | similar to Facebook, and there are a couple of U.S.
- 12 companies, as well.
- 13 \parallel Q. So from a percentage standpoint, what percentage of
- 14 | these messages come from Facebook?
- 15 \parallel A. Facebook had almost more than half of the messages sent
- 16 on that date.
- 17 \parallel Q. And you identified some non-U.S. companies. If we look
- 18 | at all of the top 10, are those U.S. only messages being
- 19 | sent?
- 20 | A. The international companies like Kakao and -- are
- 21 | usually targeting their own market, their own country. And
- 22 | the other companies like Facebook and Twitter are
- 23 | international companies, as well.
- 24 | Q. Now, comparing third-party applications to Google
- 25 | applications, what percentage of application providers that

- use the service are third party?
- 2 A. Well, third parties probably send out about 80 percent
- $\mathbf{3} \parallel$ of all messages being sent.
- 4 Q. Okay. And does Google charge either application
- **5** providers or users of Android devices to use this service?
- 6 A. No. It is a free service, like many other services
- 7 generally.

- $8 \mid Q$. I'd like to switch gears just a little bit and talk
- 9 about some of -- some of the battery life work that Google
- $10 \parallel$ has done. Can you explain some of the -- the work Google
- 11 | has done to try and improve battery life for use of its
- 12 | messaging service?
- MR. DOVEL: Objection, Your Honor, lack of
- 14 | foundation, lack of personal knowledge.
- THE COURT: Response?
- 16 MR. KORN: Mr. Manolache has been working on the
- 17 | Google messaging team since its inception, and he's the
- 18 | technical lead. He knows all of the information about the
- 19 work that happens inside of that service.
- 20 THE COURT: All right. Overruled.
- $21 \parallel$ Q. (By Mr. Korn) Can you explain some of the features that
- 22 | are involved that -- that Google has developed related to
- 23 | battery life?
- 24 | A. Yes. We did many optimizations to improve the battery
- 25 | life and problems in general. We optimize the product to

make it as compact as -- as small as possible. We have a number of organizations to not wake up the device too often because we found that every time you wake up the device, it's using more battery and we tried to group as many messages as possible in one batch of operations.

We also introduced the concept of priority of message so high priority urgent messages that get delivered fast, but messages that are less important wait until a high priority message is needed and then they all wake up the device then. And we did some work to take into account the status of the device, so if we know the device is active and it's in use, we would send all the messages without any delay. But if we know the device is not active, we delay a bit and wait for — to send messages.

THE COURT: Mr. Manolache, I'm going to ask you again to try to slow down the pace of your speech.

If you will talk slower, it will help everyone understand you better, so please try to do that.

THE WITNESS: Sorry.

THE COURT: All right. Continue.

MR. KORN: Your Honor, may we approach on a motion in limine issue?

THE COURT: You may approach.

(Bench conference.)

THE COURT: All right. Mr. Korn.

MR. KORN: Your Honor, in reference to Motion in Limine 8 that involves Google's patents and use of Google's patents in this case — in this trial, you advised us to come talk to you about whether we could submit those patents briefly with examination in this case. And under the stage in the track where Mr. Manolache is going to identify and would like to identify the existence of the patents and his testimony would include one or two sentences about each patent and then we'll pull it down.

THE COURT: Response.

MR. DOVEL: Your Honor, there is no -- this is expert opinion testimony. He has no personal knowledge and he has prepared no expert report. There's no testimony whatsoever that any of these patents actually cover any feature they're using. Look at the claims that they're -- they would actually cover anything that Google's using. Been no analysis that would require an expert to do it. He can't come in and say, well, let me -- I'll give you my expert report now that I prepared behind the scenes with counsel. I'll tell you what these patents do and what they're about, got to look at the claims.

MR. KORN: Your Honor, the purpose of his testimony is to show the existence of the patents, and he's going to give a one sentence explanation of this is generally what they're about. There is no analysis of the

1 claims and -- and whether Google practices. 2 THE COURT: Does this go to the -- to the damages 3 issue, Mr. Korn? 4 MR. KORN: Because it's relative to Google's innovations on battery life. Their damages model is based 5 6 on battery life being an integral part of their invention 7 and their improvement by Google and that's relevant to this 8 case. 9 THE COURT: All right. I'm -- I'm going to deny 10 your request for leave at this time. 11 MR. KORN: Thank you. 12 (Bench conference concluded.) 13 THE COURT: Let's continue. 14 (By Mr. Korn) Mr. Manolache, have you looked at how 15 many messages are delivered by Google's messaging service? 16 A. Yes, of course. 17 Q. Okay. And --18 MR. KORN: If you'll bring back up Plaintiff's 19 Exhibit 99 at Page 7, please? 20 (By Mr. Korn) And is this part of the -- of an analysis

- that -- that you helped with regarding how many messages to use with Google's service?
- 23 A. Yes, I did that.

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- 24 | Q. Can you briefly explain to us what's shown in the chart?
- 25 A. Yes. We -- we were asked to do a breakdown of messages

- based on the location of sender, Facebook, the Google Cloud

 Messaging server receiving the message, the mobile

 connection server delivering the mobile -- the device -- the
- 4 message to the carrier, and finally the location of the
- 5 Android device that was receiving the message.
 6 MR. KORN: And, Mr. Barnes, can we go to the top
- 7 of this page?
- 8 Q. (By Mr. Korn) And, Mr. Manolache, can you -- can you
- 9 explain when the study was done and how many messages
- 10 were -- were sent to Google's messaging service in the
- **11** study?
- 12 \blacksquare A. We performed the study in July 2013, and at that time,
- 13 | there were 11 billion messages.
- 14 \parallel Q. All right. Now, these were 11 billion messages that
- 15 | were sent to Google's messaging service; is that right?
- 16 | A. Yes.
- 17 | Q. Okay. Are all messages that are sent to Google's
- 18 | messaging service actually delivered to Android devices?
- 19 \parallel A. No. We -- we have to drop a number of messages for
- 20 | multiple reasons. It can be up to 50 percent or even more
- 21 messages that are not delivered.
- $22 \parallel Q$. And what are some of the reasons why a message might not
- 23 | be delivered?
- 24 A. As I mentioned, we have to stop the abusers. We need to
- 25 stop invalid messages. There are a large number of devices

- 1 where people have upgraded their device, where they go on
- 2 | vacation, or they just don't use a phone for other reasons.
- 3 And all those messages need to be stopped, and they are
- 4 | stopped by the Google Cloud Messaging frontend.
- 5 Q. And in the table, what does the dash line mean?
- 6 A. The dash line means that the message was not delivered,
- 7 | that it was -- never reached a phone.
- $8 \parallel$ Q. Okay. And we also see an indication of unknown. Can
- **9** ∥ you explain what that means?
- 10 \parallel A. Yes. We use IP address to identify the location. And
- 11 | in some cases, we cannot pinpoint the country because
- 12 | sometimes, for example, in Europe there are smaller
- 13 \parallel countries and we cannot know exactly where the user is.
- 14 \parallel Q. And in your experience is that more likely in the United
- 15 | States or not in the United States?
- 16 \parallel A. The United States, there is a pinpoint. It's big
- 17 | enough.
- 18 MR. KORN: And, Mr. Barnes, if you'll turn to Page
- **19** | 9.
- 20 | Q. (By Mr. Korn) From the study, how many messages were
- 21 | sent from a U.S. application provider through U.S. servers
- **22** | to a U.S. phone?
- 23 \parallel A. In -- in this -- in this study there are 193 million
- 24 messages.
- 25 | Q. Now, have Google messaging service servers resided in

- 1 data centers outside of the United States?
- 2 A. We do have a lot, yes.
- $3 \parallel Q$. About how many are outside the United States?
- 4 A. More than half.
- Q. And do messages sent to phones in the United States have
- 6 | to go through U.S. data centers?
- 7 A. No, they go to the data center that has enough capacity
- 8 | or --
- 9 MR. KORN: Mr. Barnes, if you'll bring up Slide
- 10 | 4.
- 11 | Q. (By Mr. Korn) Can you explain what this slide shows?
- 12 A. This is from the previous numbers. The messages that
- 13 | were delivered to Android devices which were in United
- 14 | States but went to data centers that were outside of United
- 15 | States.
- 16 \parallel Q. When Google's messaging service was launched in 2010,
- 17 \parallel could it have been set up so that all of the traffic went
- 18 | through servers located outside of the United States?
- 19 | A. Yes.
- 20 | Q. And would using non-U.S. servers delay the traffic in
- 21 | any meaningful way?
- $22 \parallel A$. No. We designed the system so location of server is not
- 23 | relevant.
- 24 | Q. What kind of delay would we be talking about?
- 25 | A. About hundred milliseconds, a blink of an eye. It's a

- 1 | very short delay.
- $2 \parallel Q$. So would a user of an Android device notice a hundred
- 3 | millisecond delay?
- $4 \parallel A$. No. Compared to the other delays in the system, it is a
- 5 | very small percentage.
- 6 | Q. And does -- does Google guarantee any -- any time
- 7 | requirements for delivering messages?
- 8 | A. No.
- 9 | Q. Okay. And logistically, what would be required to
- 10 | redirect traffic in Google's messaging server through data
- 11 centers located outside the United States?
- 12 \parallel A. We do move traffic on routine base every time there is a
- 13 | storm or some event. It involves an engineer moving the
- 14 | dial, setting the number to zero, and in few minutes it
- 15 | takes effect.
- 16 | Q. Okay. And does Google ever do that? Do they ever move
- 17 | servers in the normal course of their business?
- 18 A. It is very common, yes.
- 19 | Q. Okay. And can you explain why?
- $20 \parallel A$. We need to adjust to changes in real world -- again,
- 21 | storms, earthquakes, tsunamis. Also, there are some events
- 22 | which pose more users to use the system and they need to
- 23 | bring up or to use traffic and all this is done by adjusting
- 24 | those dials that count how much -- how much we are using and
- 25 where they are located.

Q. All right. Thank you, sir.

outside of the United States?

MR. KORN: I pass the witness.

THE COURT: Cross-examination.

CROSS-EXAMINATION

BY MR. DOVEL:

- Q. Sir, you were just asked about whether it would have been possible for Google to implement the messaging servers, the Google -- Google Cloud Messaging Service outside the United States back in 2010. Did you do anything to actually investigate whether it would have been possible for Google to implement C2DM and GCM using servers located entirely
- A. I didn't do any explicit work for that, yes.
 - Q. And you're not aware of any study or analysis that Google has done to analyze whether what the effects would have been of taking those Google frontend servers that are currently in the United States and moving them outside of the United States, right?
- A. We designed the system so the servers can be located anywhere, as I mentioned earlier.
- Q. The question, sir, is, are you aware of any analysis or study undertaken at Google to analyze the effects of moving the GCM frontend servers that are currently in

- the United States outside of the United States?
- $2 \parallel A$. My previous answer -- we didn't do any explicit study
- 3 | about United States versus United States. We just did
- 4 | studies that servers can be located anywhere. So it may or
- 5 | not answer your question.
- 6 Q. Well, you're not aware of any study that analyzing the
- 7 pros and cons of taking the Google frontend servers and
- 8 | moving them outside the U.S., right?
- 9 | A. I'm aware of studies locating them in different places
- 10 \parallel of the world, but we didn't do a study explicitly about a
- 11 | particular country like United States.
- 12 | Q. Well, in particular the United States, you didn't study
- **13** | that, right?
- 14 | A. In particular United States, no.
- 15 \parallel Q. Now, sir, let's talk about these metrics put up on the
- 16 screen.

- 17 Do you -- you went over with Google's counsel this
- 18 \parallel number of 193 million, which you said was the number that
- 19 | you verified were all done in the United States, right?
- 20 | A. Yes.
- $21 \parallel Q$. But there were other numbers on that analysis that
- 22 Google did that certainly could have included many messages
- 23 | that are done on servers in the United States, right?
- 24 | A. I don't know which ones, but possible.
- 25 | Q. Well, you're not trying to suggest that the only

- 1 messages that were sent in the United States were these 193
- 2 | million, right?
- $\mathbf{3} \mid \mathbf{A}$. It is a very likely number considering the number of
- 4 users we have outside of United States and the addition of
- 5 population. Yes.
- 6 Q. Let's take a look at a couple of these other categories.
- 7 | One of the categories is where you have a U.S. center and a
- 8 | location of the data center handling the request was also in
- 9 | the U.S.
- 10 Do you see that?
- 11 A. The first line?
- 12 | 0. The second line.
- 13 | A. Yeah.
- 14 | Q. And then you didn't have information about the other two
- 15 | things you looked at; that is, the location of the data
- 16 | center delivering the message or the device, right?
- 17 \parallel A. We didn't because the messages were dropped and were
- 18 | never delivered to any device, so...
- 19 | Q. Right. But those messages totaled 1.9 billion, right?
- 20 | A. Yes.
- 21 | Q. Now, this GCM software here, this -- that's used to
- 22 | implement GCM, that's not open source software, is it?
- 23 | A. No.
- 24 | Q. In other words, the public can't just go and take that
- 25 software and do whatever they want to with it, right?

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Sorry. Let me clarify.
    The GCM for Android is not open source software.
Q. Not open source?
   For Android. There are versions of GCM that are open
source and can be utilized by public.
Q. And the GCM that's -- the GCM -- the components of GCM
that are found on the Android device, that's not open source
software either, right?
A. On the device, no, it is not.
          MR. DOVEL: No further questions, Your Honor.
          THE COURT: Additional direct, Mr. Korn?
          MR. KORN: No, Your Honor.
          THE COURT: All right. You may step down, Mr.
Manolache.
          Counsel, approach the bench, please.
          (Bench conference.)
          THE COURT: Who's your next witness?
          MR. STOCKWELL: Dr. Williams.
          THE COURT: What's your best estimate of time with
him?
         MR. STOCKWELL: 20.
          THE COURT: How about cross?
          MR. DOVEL: 15.
          THE COURT: All right. Let's put him on.
          (Bench conference concluded.)
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1 THE COURT: All right. Defendant, call your next 2 witness. 3 MR. KORN: Your Honor, Google calls Dr. Tim 4 Williams. 5 THE COURT: All right. If you'll come forward, 6 Dr. Williams. 7 You have been sworn, correct? 8 THE WITNESS: Yes, sir. 9 THE COURT: Please have a seat. 10 All right. Mr. Korn, you may proceed. 11 MR. KORN: Thank you, Your Honor. 12 TIM WILLIAMS, Ph.D., DEFENDANT'S WITNESS, PREVIOUSLY 13 SWORN 14 DIRECT EXAMINATION 15 BY MR. KORN: 16 Q. Good morning, Dr. Williams. Will you please introduce 17 yourself to the jury? 18 A. Good morning. My name is Tim Williams. I grew up in a 19 small town in Michigan and went to undergraduate school at 20 Michigan Tech, which is up in the upper peninsula of 21 Michigan. 22 In 1976, I graduated from there with a bachelor's 23 degree in electrical engineering and started working on 24 building communications system, including cellular 25 telephones and systems.

In 1979, my new bride and I moved to Austin, Texas, and I went to the University of Texas at Austin for my master's degree and Ph.D. in electrical engineering. All the while, I was still working building communication systems.

In 1991, I finished my MBA at University of Texas at Austin and moved to Silicon Valley to start startup companies, and subsequently I built several successful startup companies there in Silicon Valley.

- Q. And what do you do for a living?
- 10 A. I'm an electrical engineer.
- 11 Q. Okay. And can you tell us a little bit about your 12 experience in cell phone communications?
 - A. When I started working on cell phone communications, the cell phone was about the size of a shoebox. And I've built cell phones; I've built chipsets; and I've built systems in communications over my 37 years of experience in this industry. My team and I have built the first GSM chipset in the world, which is the third-generation cellular system.
 - Q. And did you prepare a resume that is listed as Defendant's Exhibit 192 in this case?
- 21 | A. I did.

- Q. Now, Dr. Williams, what were you asked to do for this trial?
- 24 A. I was asked to do three things: To look at
 25 non-infringing alternatives. I was asked to look at the

- 1 | battery life issues that have been discussed previously.
- 2 And I was asked to look at comparable technologies to the
- 3 | '914 patent.
- 4 | Q. And did you hear Dr. Knox testify yesterday regarding a
- 5 | non-infringing alternative?
- 6 | A. Yes, I did.
- $7 \parallel Q$. And he referred to something as that he referred to as
- 8 | the best non-infringing alternative as having multiple
- 9 persistent connections.
- Do you agree that that's the best non-infringing
- 11 | alternative?
- 12 A. Absolutely not.
- 13 | Q. Okay.
- 14 \parallel A. The -- the best non-infringing alternative is to simply
- 15 | move the processing of GCM offshore, outside the United
- 16 States.
- 17 \parallel Q. Now, why is moving the servers offshore the best
- 18 | non-infringing alternative?
- 19 A. There's no effect to the user. It's something that
- 20 | Google redirects their processing every day for where the
- 21 processing is going to be performed. Google has the
- 22 | capacity outside the United States. It's a simple and easy
- 23 | move for them to accomplish.
- 24 | Q. And what does it take to move a server?
- 25 A. Well, you heard Mr. Manolache talk about it previously.

Q. And in your experience, would it be acceptable for Google to move servers outside the United States in 2010?

A. Yes. In fact, from when Google Cloud Messaging was initially launched, they were using servers outside the United States with, as far as I know, no -- no user complaints. So the operation of the system worked fine.

And you just heard Mr. Manolache say that he designed the system such that they could use servers wherever they were

Q. Now, Dr. Knox testified that it wouldn't have been acceptable to launch the messaging service on non-U.S. servers because of the '279 patent.

Do you agree with that?

- A. No, I do not.
- | Q. Why not?

located.

A. Because the '279 patent describes a -- a system. It's a system set of claims rather than a method claim. And as I understand the -- the law, where you put the system to use is where the infringement occurs. So if the system is put to use, if the servers are located outside the United States, there wouldn't be an infringement of that patent, that U.S. patent by something that was occurring outside the

- 1 United States.
- $2 \parallel Q$. Has there been any determination in any court that
- 3 | Google infringes the '279 patent?
- 4 A. No, none at all.
- 5 | Q. And has Dr. Knox submitted any formal report or opinion
- 6 | that Google infringes the '279 patent?
- $7 \parallel A$. No, he has not.
- 8 Q. And was the Android operating system accused of
- 9 | infringement in this case?
- 10 A. No, just the servers that comprise the Google Cloud
- 11 Messaging Service.
- 12 | Q. Now, Dr. Knox didn't compare the Google's messaging
- 13 \parallel service versus the -- the next best alternative, did he?
- 14 | A. No, he did not.
- 15 \parallel Q. Okay. So if he did, if he compared it to moving the
- 16 | servers outside the United States, what impact on battery
- 17 | life would be -- would be seen?
- 18 \parallel A. None at all.
- 19 $\|$ Q. And why is that?
- $20 \parallel \text{A.}$ Because the -- where the message is processed has no
- 21 | effect on the battery life of the mobile device.
- 22 | Q. In your opinion, is it appropriate to enter --
- 23 | analyze battery life relative to the '914 patent?
- 24 A. No. The '914 patent -- as you heard Mr. Payne say, the
- 25 | '914 patent doesn't say anything about battery life. It

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doesn't consider the battery life of the device that it's sending the message to. That's because the technology described in the '914 patent is dealing with computers that are plugged into the wall and receivers that are plugged into those computers. THE COURT: Counsel, approach the bench, please. (Bench conference.) THE COURT: I am concerned that we are getting into the '279 patent in much greater detail than we talked about in pretrial. I'm concerned this may create confusion to the jury. I think we are getting perilously close to going into the non-infringing alternative and addressing the underlying issue of infringement. I'm transitioning into battery life, MR. KORN: and I've moved past the '279 patent. THE COURT: To the extent you've gone where you've gone, we can't undo it, but I think you've gone too far. MR. KORN: Yes, Your Honor. (Bench conference concluded.) THE COURT: All right. Let's continue. MR. KORN: Thank you, Your Honor. (By Mr. Korn) So, Dr. Williams, does the '914 patent disclose battery savings on smartphone or handheld devices? The '914 patent doesn't say anything about A. No.

smartphones, doesn't talk about handset devices, and doesn't

- 1 | look at battery life as an issue.
- $\mathbf{2} \mid \mathbf{Q}$. And does the '914 patent describe using a persistent
- 3 connection or keep alive messages?
- 4 A. No. Keep alive messages and persistent connections were
- 5 | invented far after the '914 patent was filed for. So it's
- 6 | technology that wasn't even considered in the '914 patent.
- $7 \parallel Q$. And the description in the patent and the actual
- 8 | AirMedia Live product, did it use persistent connections?
- 9 A. No, it didn't. These are technologies that came along
- 10 | far after the '914 patent was filed for.
- 11 | Q. And were you in the courtroom to hear Dr. Knox's
- 12 | testimony about his battery life tests?
- 13 | A. Yes, I was.
- 14 \parallel Q. Did you perform tests similar to what Dr. Knox
- 15 performed?
- 16 \parallel A. Well, I performed a more reasonable set of tests. To
- 17 | answer the question that really needs to be answered, which
- $18 \parallel$ is, what is the effect of Google's Cloud Messaging service
- 19 | on battery life of a smartphone?
- 20 And I looked at far different things than Dr. Knox
- 21 | looked at.
- 22 | Q. Okay. Can you explain your test, please?
- 23 \parallel A. This is a picture of my test setup. In the middle, you
- 24 | see the device under test, which is a Samsung phone. And I
- 25 | hooked that up to a very sophisticated instrument, the blue

box in the upper right, which measures the current -instantaneous current consumption of the device.

So here, I'm measuring the power used by the cell phone in various activities. And what I did was I looked at the cell phone doing normal activities that you and I do every day: Checking our email, launch a phone call, doing some text messaging, maybe looking at a video, playing a game. Those are all activities that you normally do on a smartphone.

So I looked at the power consumption of the device while it's doing those activities.

- Q. And can you explain the results of your tests?
- A. Yes. What I found was -- this is some of the data from that test. DC2 devices under test, the white unit and the black unit, and I graphed the power consumption.

What you see is, in the various activities that I just described, a far greater power consumption than what Dr. Knox measured in his test. So the power consumption that Dr. Knox is talking about is — is very much smaller than normal activities than you and I go through every day in using our smartphones.

- Q. And did you prepare a slide to help show the differences between what you tested and what Dr. Knox tested?
- A. Yes. This little animation shows on the left is the device under test as I was testing it. And on the right,

the device as Dr. Knox was testing it. So if you hit go, you can see on the left is a normal user. He's launching phone calls; he's playing games; he's checking his email, et cetera.

And on the right, it just shows what Dr. Knox was testing, which was basically laying your cell phone on the table and leaving it untouched. And — but at the end of the day, the user will plug their phone in and recharge their phone. So whether the phone is recharged from 20 percent capacity or from 80 percent capacity, it makes no difference to the user. He's still just recharging his phone.

- MR. KORN: And, Mr. Barnes, will you bring up Knox Slide 29?
- Q. (By Mr. Korn) Dr. Williams, if -- if -- if Dr. -- if Dr. Knox took into account normal-use cases, how would that have impacted the percentages that he described for improvements in battery life?
- A. Dr. Knox described several percentage changes in battery life to -- to the GCM service. If he had really considered how a normal user uses their cell phone in everyday use, those numbers would be dramatically lower.
- Q. Now, Dr. Williams, did you analyze any patents other than the '914 patent in this case?
- 25 A. Yes. I looked at several patent -- several licensing

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- agreements to -- with Google in order to identify compatible 2 technology to the '914 patent.
 - Q. And can you tell us a little bit about your experience in the field that would help you understand this comparability analysis?
 - A. Yes. As I mentioned, I started out when cell phones were the size of a shoebox and have been in the industry for 37 years, building all sorts of devices, chipsets, phones, subscriber devices, systems protocols.

And I've also testified many times in federal court and at the International Trade Commission on issues dealing with patent litigation regarding cellular technology. I've worked for virtually everyone in the cell phone industry, either worked for or against them.

So, for example, I've worked for and against Samsung. I've worked for and against Microsoft. I've worked for and against Research in Motion. So I've worked for very large I've worked for single inventors. I've worked companies. for people who owned the patent. I've worked for people who are defending against a patent litigation.

So I'm an independent expert. I have a lot of experience in intellectual property related to cell phones. And I used that experience to guide me in determining my decisions here.

Q. Dr. Williams, did you find any comparable technologies

1 and licenses? 2 A. Yes. I found two licenses that have comparable 3 technology. One was between Motorola and Google, and the 4 other was between a company called Aloft Media and Google. 5 Q. All right. Let's start with the Motorola -- Motorola 6 agreement. 7 MR. KORN: Mr. Barnes, if you'll bring up 8 Defendant's Exhibit 214. 9 (By Mr. Korn) Can you explain why this agreement is 10 comparable to the technology in the '914 patent? 11 A. Yes. This is an agreement between Motorola and Google. 12 And if we look at the appendix --13 MR. KORN: And that's on Page 12, Mr. Barnes. 14 A. -- we see a list of the patents that were involved in 15 that agreement. And if you notice -- just by the names of 16 the patents, you notice they deal with communications. The 17 first and the fourth row deals specifically with sending 18 information from a server to a paging receiver and having

Q. (By Mr. Korn) And the second agreement you referred to is the Aloft agreement?

that paging receiver manipulate that information. So this

is very similar technology. It's compatible technology to

MR. KORN: Which, Mr. Barnes, is Defendant's Exhibit 215.

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what the '914 describes.

- 1 | A. Yes.
- 2 | Q. (By Mr. Korn) And can you explain to us why in your
- 3 | opinion the Aloft -- the technology in the Aloft agreement
- 4 | is similar to the '914 patent or comparable to?
- 5 A. Again, if we look at the list of patents, I've
- 6 | identified at least one patent which deals with collecting
- 7 | information, organizing that information for -- for
- 8 | transmission to a wireless device, and having that wireless
- 9 device receive that information and process that
- 10 | information.
- 11 \parallel Q. And can you tell us about the patent that you looked at
- 12 | in the Aloft agreement?
- 13 | A. That's the '936 patent, which is listed as No. 53 in the
- 14 | appendix.
- 15 \parallel Q. And why is that comparable to the technology in the '914
- 16 patent?
- 17 | A. Because it's -- it's collecting information; it's
- $18 \parallel$ organizing that information; and it's sending it to a
- 19 | wireless receiver.
- 20 | Q. Does Google practice any of these patents?
- 21 | A. It's my understanding of the law is that that's not
- 22 | required. All that's required is that they have paid money
- 23 | to license these agreements.
- 24 | Q. Thank you, Dr. Williams.
- 25 MR. KORN: I pass the witness.

THE COURT: Cross-examination?

2 | You may proceed, Mr. Dovel.

MR. DOVEL: Thank you, Your Honor.

CROSS-EXAMINATION

5 | BY MR. DOVEL:

- Q. Mr. Williams, do you recognize the phones that I put up
- 7 on the screen here as Android phones?
- **8** | A. Yes.

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- 9 Q. The makers include Samsung, HTC, LG, Motorola, and
- 10 | Huawei; is that right?
- 11 | A. Yes.
- 12 \parallel Q. In recent years, you've testified as an expert on behalf
- 13 | of each of these companies, right? All these Android
- 14 | companies, right?
- 15 A. Yes. I've also worked against Samsung, and I've also
- 16 worked for their competitors in the industry.
- 17 | Q. Well, let's talk about that. Here's a list of a few of
- 18 | your recent cases that you've worked on. Each of these you
- 19 | are representing the company that's highlighted there in
- 20 | yellow; is that right?
- 21 | A. Correct.
- 22 | Q. Each of those is an Android phone-maker; is that right?
- 23 A. Yes, they also make other phones.
- 24 | Q. Next page, these are also all Android phone-makers.
- 25 | Those are also cases you worked on, right?

- 1 A. Yes. I've also worked against Samsung as I mentioned
- 2 | before.
- 3 | Q. And here's additional cases you've worked on. These are
- 4 | also Android phone-makers; is that right?
- 5 A. Yes. However, you're leaving out the cases where I
- 6 worked against Android phone-makers.
- 7 | Q. Well, in recent years --
- 8 THE COURT: Dr. Williams, you're going to need
- 9 | to -- to -- to limit your answers to the questions asked.
- 10 | If counsel for Google wants to address the same issues
- 11 | again, they'll have that opportunity, but you need to answer
- 12 | the questions and not offer things that are not asked for.
- 13 Do you understand?
- 14 THE WITNESS: Yes, sir.
- 15 | THE COURT: All right. Let's continue.
- 16 \parallel Q. (By Mr. Dovel) In 2010, you made more than a million
- 17 dollars testifying as an expert, right?
- 18 | A. That's correct.
- 19 | Q. In 2011, you made more than a million dollars testifying
- 20 | as an expert, right?
- 21 | A. Sure.
- $22 \parallel$ Q. 2012, you made more than a million dollars testifying as
- 23 | an expert, right?
- **24** | A. Yes, I did.
- 25 | Q. And what about this last year; the same?

- 1 | A. No.
- 2 | Q. Less money?
- 3 | A. Yes.
- 4 | Q. You're not coming here, sir, as an independent expert
- 5 | with no bias, right?
- 6 A. I'm coming as an independent expert with no bias.
- 7 | Q. Well, sir, with all this experience, you certainly
- 8 | understand what non-infringing alternatives are, right?
- 9 | A. I do.
- 10 | Q. And in cases you worked on for some of these
- 11 | phone-makers before, you were called upon to try to identify
- 12 | non-infringing alternatives in patent cases, right?
- 13 | A. Yes.
- 14 \parallel Q. And non-infringing alternatives are ways that somebody
- 15 | could say design around the patent and do something
- 16 different than the patent and still achieve the same
- **17** ∥ results, right?
- 18 | A. I wouldn't describe it that way, but I'll take your
- 19 | hypothesis.
- 20 \parallel Q. Now, what you -- I put on the board is from your table
- 21 | of contents where you identify the non -- what you felt were
- 22 | the non-infringing alternatives for the '914 patent, right?
- 23 A. Yes.
- 24 | Q. And you identified two of them, correct?
- 25 A. Yes.

- $1 \parallel Q$. The first one was that the Google servers can be located
- 2 | outside of the United States, correct?
- 3 | A. Correct.
- $4 \parallel Q$. And under that alternative, Google would continue to do
- 5 | the exact same process, the exact same central broadcast
- 6 | server steps, right?
- 7 | A. Correct.
- 8 Q. It's not a different method. You're just saying if they
- 9 did it outside the United States, they could evade the U.S.
- 10 | patent laws, right?
- 11 A. I wouldn't use the word evade. And as I understand it,
- 12 | that's the law, so I'm just following the law.
- 13 \parallel Q. Well, you wouldn't use the word evade. What word would
- 14 you use?
- 15 \parallel A. I would use that they choose to perform the steps of the
- 16 | method outside the jurisdiction in the United States.
- 17 \parallel Q. In order not to be subject to U.S. patent laws, right?
- 18 \parallel A. In order to not infringe a U.S. patent, that's the law.
- 19 | I'm just -- I'm just following the law.
- 20 \parallel Q. But they would be doing the same process, the same
- 21 | central broadcast server process, right?
- 22 | A. As what?
- 23 \parallel Q. As set forth in the '914 patent.
- 24 | A. I don't understand your question.
- 25 | Q. Well, sir, you did not identify any non-infringing

- 1 | alternative that involved doing a different process,
- 2 something other than the -- the central broadcast server
- 3 | process that's in Claim 1 of the '914 patent, right?
- $4 \parallel$ A. No, not in my report. No.
- 5 | Q. Well, you say in your report that the only work you've
- 6 done in this case is to try to identify non-infringing
- 7 | alternatives, right?
- 8 A. Correct.
- 9 | Q. You haven't filed some other report in some other case
- 10 | where you've identified non-infringing alternatives to the
- **11** | '914, right?
- 12 | A. No.
- 13 | Q. All right. So you did all your work in this case and
- 14 | you were unable to identify a single non-infringing
- $15 \parallel$ alternative that involved doing a different process in the
- 16 U.S. that would work just as well for Google, right?
- 17 A. Again, I wouldn't say unable. I identified two very
- 18 | viable alternatives which were acceptable.
- 19 Q. But they're not alternatives that allow Google to send
- 20 | notifications and practice it in the United States, right?
- 21 | A. Correct.
- 22 | Q. Now, sir, on the subject of outside the United States,
- 23 | the '914 patent and the '279 patent are very similar, right?
- $24 \parallel A$. No. One is a method and one is a system claim.
- 25 | Q. That's -- that's the biggest difference between them,

- 1 right? One's a method; one's a system. That's an important
 2 difference, right?
- $3 \parallel$ A. There's been no formal analysis of the '279 patent, no
- 4 | report by Dr. Knox regarding the '279 patent, and the claims
- $5 \parallel$ of the '279 patent have not been the subject of my opinion.
- 6 | Q. Sir, you reviewed Dr. Knox's supplemental report on the
- 7 | '279 patent, right?
- **8** | A. Yes.
- 9 | Q. He did an analysis, right?
- 10 A. Not a formal submission to the Court.
- 11 \parallel Q. Well, a formal submission to the Court, he prepared a
- 12 | written expert report, right?
- 13 \parallel A. He -- he did not analyze infringement of the '279
- 14 patent.
- 15 \parallel Q. He did a written expert report and concluded that if
- 16 | they moved the servers outside, it would still subject
- 17 Google to liability. That was his conclusion, right?
- 18 \parallel A. That was his only analysis.
- 19 | Q. And the reason he did that is because, unlike method
- 20 | claims, if you've got components of the system outside the
- 21 United States, you can still be liable for patent
- 22 | infringement in the United States, right?
- 23 | A. That calls for a legal conclusion, and I'm not a lawyer.
- 24 | Q. Well, okay. Let me ask you this: Do you agree, sir,
- 25 | that you've got no opinion on the subject of whether, if

Google had the servers outside the United States -- some
components outside the United States that they would -- that
the '279 would be infringed or not?

A. My opinion is that as I understand the law, that if Google executed the process of the GCM on servers located outside the United States, they would not be subject to U.S. law.

Q. What law?

THE COURT: All right. I'm going to stop this right now. This witness is not a legal expert. He's not entitled to opine on issues of the law, and the Court will supply the law to the jury in this case. We need to move on.

MR. DOVEL: Yes, Your Honor.

Q. (By Mr. Dovel) If the Court instructs the jury that a system claim can still be infringed if components are outside the United States, if it's put into service in the United States by, for example, a user or a — a third-party app provider submitting — submitting a request to use the service, that would then mean that Google would still infringe the '279 patent, right?

- A. Well, in your hypothetical case, Google would not be the infringer. The third-party app provider would be the infringer.
- Q. Well, the Google would be a contributory infringer in

1 that hypothetical, right? 2 THE COURT: All right. Counsel, approach the 3 bench, please. 4 (Bench conference.) 5 THE COURT: What part of move along do you not 6 understand, Mr. Dovel? Now, I understand you didn't raise 7 this earlier because you wanted to go there yourself -- the prohibition yourself. 8 9 MR. DOVEL: I'm moving along. Yes, sir. 10 THE COURT: All right. Let's do that. 11 (Bench conference concluded.) 12 THE COURT: All right. Let's proceed. 13 (By Mr. Dovel) You gave your testimony earlier about Aloft and Motorola and said that those were -- had license 14 15 agreements with comparable patents in them, right? 16 A. Yes, comparable technology. 17 Now, sir, and the test -- the test you used for whether 18 they were comparable was two different tests for each of the 19 different patents, right? 20 A. No, same test. 21 Q. Well, let's take a look at your report. I quoted -- I 22 put the sentences from your report that described your 23 analysis. And for one of them, you said: This patent is 24 comparable to the claimed technology of the '914 patent,

because, like the '914 patent, this patent is directed

- 1 | towards sending information over a radio-paging network to
- 2 | the radio-paging receiver, right?
- 3 A. Correct, for further processing.
- $4 \parallel Q$. And in your view, any patent that does that would be
- 5 | comparable technology, right?
- 6 A. With the addition of for -- with subsequent processing
- 7 | by the paging -- radio-paging service.
- 8 | Q. Well, it doesn't say subsequent processing there, does
- 9 | it?
- 10 A. That's my opinion.
- 11 \parallel Q. You need to answer my question. In your report, it
- 12 | doesn't say anything about subsequent processing, does it?
- 13 \parallel A. Not in that sentence.
- 14 \parallel Q. Well, in no sentence of your report does it say anything
- 15 | about subsequent processing?
- 16 A. That's the intent of my report.
- 17 \parallel Q. The question is, in your report, there's no mention of
- 18 | subsequent processing, right?
- 19 A. I believe there is.
- $20 \parallel Q$. Well, sir, take a look at the next sentence. This
- 21 describes the second patent. You say: It's comparable
- 22 | because this patent is directed to the distribution of
- 23 | information from a network to a remote computing device,
- **24** | right?
- 25 A. Yes.

- 1 | Q. In your view, if we have a patent that's directed to
- $2 \parallel$ the distribution of information from a network to a
- 3 | remote computing device, it's going to be comparable?
- 4 | A. Over a wireless service, yes.
- 5 Q. All right. Let's take a look at this abstract with you.
- 6 An abstract for a patent, it's licensed by Google. It calls
- 7 | for a system that's presented for transmitting document
- 8 references or tokens to users.
- 9 Do you see that part?
- 10 | A. Yes.
- 11 \ Q. And the next highlighted part talks about mobile
- 12 | computing devices are coupled to the wire-based network
- 13 | through an RF radio transceiver.
- 14 Do you say that?
- 15 | A. Yes.
- 16 | Q. That's wireless transmission, right?
- 17 | A. Yes, it is.
- 18 \parallel Q. And it talks about how information is emailed to
- 19 | recipients with an email account.
- 20 Do you see that at the bottom?
- 21 A. The tokens are emailed to recipients with an email
- 22 | account. Yes.
- 23 | Q. And here's a -- a diagram. Do you see where it shows
- 24 | this mobile computing device 118 and this wireless
- 25 | transmission, right?

- 1 | A. Yes.
- $2 \parallel Q$. And then you see the network that's below that?
- 3 | A. Yes.
- $4 \parallel Q$. This is distribution of information from a network to a
- 5 | remote computing device, right?
- 6 | A. No.
- **7** | Q. Why not?
- 8 A. Because this is sending a token to a smartphone, and
- 9 | then the smartphone requests the distribution of information
- 10 | back into the network so that the information can go to a
- 11 printer.
- 12 So it -- it's a system to get essentially a key or a
- 13 | token that allows you to print a document on a printer
- 14 | that's near you.
- 15 | Q. Sir?
- 16 \parallel A. The information never leaves the wired network. It's
- 17 \parallel just the token that's sent to the -- to the smartphone, and
- 18 \parallel then the smartphone sends the token back to the network for
- 19 | transmission of the real information to a printer.
- 20 | Q. Sir, the token contains information, right?
- **21** \parallel A. No. The token -- the real information is -- never
- 22 | leaves the wired network in this patent.
- 23 | Q. You say real information. The token contains
- 24 | information about where the document is located, right?
- 25 | A. The information never leaves the wired network in this

- 1 | patent.
- $2 \parallel Q$. The question is about the token. The token contains
- 3 | information about where the document's located, right?
- 4 | A. Yeah.
- 5 | Q. Now, when you analyzed these Aloft and Motorola patents,
- 6 did you see any evidence that Google had made any use of any
- 7 | of those patents that it acquired from Motorola or that it
- 8 | licensed from Aloft?
- 9 A. No. It's my understanding that's -- that's not an
- 10 | important piece of information.
- 11 Q. Well, we'll see whether it is or not. I just want to
- 12 get the testimony here.
- 13 | THE COURT: All right. Counsel, refrain from
- 14 | sidebar comments.
- MR. DOVEL: Yes, Your Honor.
- 16 THE COURT: Ask your questions, and let's get
- 17 | direct answers from the witness.
- 18 \parallel Q. (By Mr. Dovel) Did you see any information indicating
- 19 | that Google had made any use of -- withdrawn.
- 20 These license -- patents that are licensed from Aloft
- $21 \parallel$ and -- and -- and Motorola, they didn't have anything to do
- 22 | with the GCM server, right? The net -- the messaging
- 23 servers that Google operates?
- 24 | A. I haven't analyzed that question.
- 25 | Q. You didn't see any information that suggested that

- 1 Google was using those patents as part of anything that
- 2 | relates to this case, right?
- $3 \parallel$ A. Again, I don't -- I didn't analyze use of those patents,
- 4 | because it's not an important consideration.
- 5 | Q. You didn't see any information suggesting that Google
- 6 was making any use of those patents, right?
- 7 A. Again, I didn't analyze the use of those patents,
- 8 | because it's not important to this investigation.
- 9 | Q. Well, sir, did anyone from Google tell you that they
- 10 were making use of those patents?
- 11 | A. No.
- 12 | Q. Did you see any document of Google's that told you or
- 13 | suggested to you that Google might be making use of those
- 14 | patents?
- 15 | A. No.
- 16 \parallel Q. Did you compare the claims of those patents to anything
- 17 | that Google was doing?
- 18 \parallel A. That wasn't part of this investigation, not required.
- 19 MR. DOVEL: No further questions, Your Honor.
- 20 | Pass the witness.
- 21 THE COURT: Further direct, Mr. Korn?
- 22 MR. KORN: No, Your Honor.
- THE COURT: You may step down, Dr. Williams.
- 24 THE WITNESS: Thank you, Your Honor.
- 25 THE COURT: Ladies and gentlemen, this is an

appropriate time to break for lunch. I'm going to ask you as you retire to the jury room to leave your juror notebooks before you go to lunch.

I'll remind you, as you would expect me to, to tell you not to discuss the case amongst yourselves or with anyone else. If you'll be back about an hour from now, we'll try to reconvene at 1:00 o'clock. You're excused for lunch at this time.

COURT SECURITY OFFICER: All rise.

(Jury out.)

THE COURT: All right. We stand in recess for lunch.

(Lunch recess.)

I HEREBY CERTIFY that the foregoing is a true and correct transcript from the stenographic notes of the proceedings in the above-entitled matter to the best of my ability.

CERTIFICATION

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